

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/525,000 A  
Source: IFWP  
Date Processed by STIC: 7/31/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/525,000A

TIME: 07:42:49

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07282006\J525000A.raw

```

3 <110> APPLICANT: Merck Patent GmbH
5 <120> TITLE OF INVENTION: Variants of the major allergen Phl p 1 from timothy grass
7 <130> FILE REFERENCE: P 02/129
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/525,000A
C--> 9 <141> CURRENT FILING DATE: 2005-02-17
9 <150> PRIOR APPLICATION NUMBER: EP 02 018 157.4
10 <151> PRIOR FILING DATE: 2002-08-19
12 <160> NUMBER OF SEQ ID NOS: 2
14 <170> SOFTWARE: PatentIn version 3.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 723
18 <212> TYPE: DNA
19 <213> ORGANISM: Phleum pratense
21 <220> FEATURE:
22 <221> NAME/KEY: CDS
23 <222> LOCATION: (1)..(720)
24 <223> OTHER INFORMATION:
W--> 27 <400> 1
28 atc ccc aag gtt ccc ccc ggc ccg aac atc acg gcg acc tac ggc ggc 48
29 ile pro lys val pro pro gly pro asn ile thr ala thr tyr gly gly
30 1 5 10 15
32 aag tgg ctg gac gcg aag agc acc tgg tac ggc aag ccg acg gcc gcc 96
33 lys trp leu asp ala lys ser thr trp tyr gly lys pro thr ala ala
34 20 25 30
36 ggt ccc aag gac aac ggc ggc gcg tgc ggg tac aag gac gtg gac aag 144
37 gly pro lys asp asn gly gly ala cys gly tyr lys asp val asp lys
38 35 40 45
40 ccc ccg ttc agc ggc atg acc ggc tgc ggc aac acc ccc atc ttc aag 192
41 pro pro phe ser gly met thr gly cys gly asn thr pro ile phe lys
42 50 55 60
44 tcc ggc cgg ggc tgc ggc tcc tgc ttc gag atc aag tgc acc aag ccc 240
45 ser gly arg gly cys gly ser cys phe glu ile lys cys thr lys pro
46 65 70 75 80
48 gag gcc tgc tcc ggc gag ccc gtg gtg gtc cac atc acc gac gac aac 288
49 glu ala cys ser gly glu pro val val val his ile thr asp asp asn
50 85 90 95
52 gag gag ccc atc gcc gcg tac cac ttc gac ctc tcc ggc atc gcg ttc 336
53 glu glu pro ile ala ala tyr his phe asp leu ser gly ile ala phe
54 100 105 110
56 ggg tcc atg gcc aag aag ggc gac gag cag aag ctg cgc agc gcc ggc 384
57 gly ser met ala lys lys gly asp glu gln lys leu arg ser ala gly
58 115 120 125
60 gag gtg gag atc cag ttc cgc cgc gtc aag tgc aag tac ccg gag ggc 432

```

## RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/525,000A

TIME: 07:42:49

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07282006\J525000A.raw

```

61 Glu Val Glu Ile Gln Phe Arg Arg Val Lys Cys Lys Tyr Pro Glu Gly
62      130      135      140
64 acc aag gtg acc ttc cac gtg gag aag ggg tcc aac ccc aac tac ctg      480
65 Thr Lys Val Thr Phe His Val Glu Lys Gly Ser Asn Pro Asn Tyr Leu
66 145      150      155      160
68 gcg ctg ctg gtg aag ttt gtc gcc ggc gac ggc gac gtg gtg gcg gtg      528
69 Ala Leu Leu Val Lys Phe Val Ala Gly Asp Gly Asp Val Val Ala Val
70      165      170      175
72 gac atc aag gag aag ggc aag gac aag tgg atc gcg ctc aag gag tcg      576
73 Asp Ile Lys Glu Lys Gly Lys Asp Lys Trp Ile Ala Leu Lys Glu Ser
74      180      185      190
76 tgg gga gcc atc tgg agg atc gac acc ccg gag gtg ctc aag ggc ccc      624
77 Trp Gly Ala Ile Trp Arg Ile Asp Thr Pro Glu Val Leu Lys Gly Pro
78      195      200      205
80 ttc acc gtc cgc tac acc acc gag ggc ggc acc aag ggc gag gcc aag      672
81 Phe Thr Val Arg Tyr Thr Thr Glu Gly Gly Thr Lys Gly Glu Ala Lys
82      210      215      220
84 gac gtc atc ccc gag ggc tgg aag gcc gac acc tgc tac gag tcc aag      720
85 Asp Val Ile Pro Glu Gly Trp Lys Ala Asp Thr Cys Tyr Glu Ser Lys
86 225      230      235      240
88 tga      723
91 <210> SEQ ID NO: 2
92 <211> LENGTH: 240
93 <212> TYPE: PRT
94 <213> ORGANISM: Phleum pratense
96 <400> SEQUENCE: 2
98 Ile Pro Lys Val Pro Pro Gly Pro Asn Ile Thr Ala Thr Tyr Gly Gly
99 1      5      10      15
102 Lys Trp Leu Asp Ala Lys Ser Thr Trp Tyr Gly Lys Pro Thr Ala Ala
103      20      25      30
106 Gly Pro Lys Asp Asn Gly Gly Ala Cys Gly Tyr Lys Asp Val Asp Lys
107      35      40      45
110 Pro Pro Phe Ser Gly Met Thr Gly Cys Gly Asn Thr Pro Ile Phe Lys
111      50      55      60
114 Ser Gly Arg Gly Cys Gly Ser Cys Phe Glu Ile Lys Cys Thr Lys Pro
115 65      70      75      80
118 Glu Ala Cys Ser Gly Glu Pro Val Val Val His Ile Thr Asp Asp Asn
119      85      90      95
122 Glu Glu Pro Ile Ala Ala Tyr His Phe Asp Leu Ser Gly Ile Ala Phe
123      100      105      110
126 Gly Ser Met Ala Lys Lys Gly Asp Glu Gln Lys Leu Arg Ser Ala Gly
127      115      120      125
130 Glu Val Glu Ile Gln Phe Arg Arg Val Lys Cys Lys Tyr Pro Glu Gly
131      130      135      140
134 Thr Lys Val Thr Phe His Val Glu Lys Gly Ser Asn Pro Asn Tyr Leu
135 145      150      155      160
138 Ala Leu Leu Val Lys Phe Val Ala Gly Asp Gly Asp Val Val Ala Val
139      165      170      175
142 Asp Ile Lys Glu Lys Gly Lys Asp Lys Trp Ile Ala Leu Lys Glu Ser

```

## RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/525,000A

TIME: 07:42:49

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07282006\J525000A.raw

143				180				185				190				
146	Trp	Gly	Ala	Ile	Trp	Arg	Ile	Asp	Thr	Pro	Glu	Val	Leu	Lys	Gly	Pro
147				195				200					205			
150	Phe	Thr	Val	Arg	Tyr	Thr	Thr	Glu	Gly	Gly	Thr	Lys	Gly	Glu	Ala	Lys
151			210					215					220			
154	Asp	Val	Ile	Pro	Glu	Gly	Trp	Lys	Ala	Asp	Thr	Cys	Tyr	Glu	Ser	Lys
155	225					230					235					240

**VERIFICATION SUMMARY**

DATE: 07/31/2006

PATENT APPLICATION: US/10/525,000A

TIME: 07:42:50

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07282006\J525000A.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:27 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:24